Appl. No. 10/502,172

Amdt. dated Jan. 5, 2006

Reply to Office action of Oct. 6, 2005

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1(currently amended) A device for controlling a gas discharge lamp—(10) with

- a current supply device—(24) for supplying the lamp—(10) with an alternating current—(IL) of given amplitude,
- and a programming unit— (μC) for providing amplitude values to the current supply device—(24) during a run-up phase—(B1),
- wherein the run-up phase comprises at least the interval from 1 s after ignition of the lamp—(10) to 3 s after ignition of the lamp—(10), and
- wherein the programming unit— (μC) effectuates a substantially rising gradient in time of the current—(IL) over during—the run-up phase (B1).

Claim 2 (currently amended): A device as claimed in claim 1, wherein the time gradient is chosen such that the luminous flux—(L) generated by the lamp—(10) achieves at least at two given moments assigned minimum valvesvalues.

Claim 3 (canceled)

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Claim 4 (currently amended): A device as claimed in claim 1, wherein the current—(IL) rises by at least 30% in the run-up phase—(B1) with respect to the value at the start of said phase.

Claim 5 (currently amended): A device as claimed in claim 1, wherein the time gradient of the current—(IL) in the run-up phase—(B1) rises monotonically averaged over time.

Claim 6 (currently amended): A device as claimed in claim 1, wherein the current—(IL) is an alternating current with a substantially square-wave characteristic in time and a frequency of at least 200 Hz.

Claim 7 (currently amended): A device as claimed in claim 1, wherein the current—(IL) drops to a stationary value in a transition phase—(B2) following the run-up phase—(B1).

Claim 8 (currently amended): A device as claimed in claim 1, wherein the current—(IL) at the start of the run-up phase—(B1) amounts to at most 75%, preferably less than 60% of the maximum value that the current assumes in the interval after 1 s after ignition.

Claim 9 (canceled)

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Claim 10 (canceled)

Claim 11 (currently amended): A method of controlling a gas discharge lamp wherein

- an alternating current—(IL) flows through the lamp in a run-up phase—(B1) which comprises at least the interval from 1 s after ignition of a lamp—(10) to 3 s after ignition of the lamp—(10),
- wherein the current—(IL) is controlled such that its amplitude rises during said run-up phase, and
- wherein the time gradient of the current—(IL) is chosen such that the luminous flux—(L) generated by the lamp—(10) achieves at at least to two given moments in time—(B1) assigned minimum valvesvalues.

Claim 12 (new): A device as claimed in claim 8, wherein the current at the start of the run-up phase amounts to at most 60% of the maximum value that the current assumes in the interval after 1 s after ignition.

Claim 13 (new): A device for controlling a gas discharge lamp with

- a current supply device for supplying the lamp with an alternating current of given amplitude,
- and a programming unit for providing amplitude values to the current supply device during a run-up phase,

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- wherein the run-up phase comprises at least the interval from 0.5 s after ignition of the lamp to 4 s after ignition of the lamp, and

- wherein the programming unit effectuates a substantially rising gradient in time of the current throughout the run-up phase.

Claim 14 (new): A lighting system with

- a gas discharge lamp
- and a control device
- the control device comprising a current supply device for supplying the lamp with an alternating current of given amplitude, and a programming unit for providing amplitude values to the current supply device during a run-up phase,
- wherein the run-up phase comprises at least the interval from 1 s after ignition of the lamp to 3 s after ignition of the lamp , and
- wherein the programming unit effectuates a substantially rising gradient in time of the current over the run-up phase.

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Claim 15 (new): A lighting system as claimed in claim 14, wherein the gas discharge lamp has a filling free from Hg.

Claim 16 (new): A device for controlling a gas discharge lamp with

- a current supply device for supplying the lamp with an alternating current of given amplitude,
- and a programming unit for providing amplitude values to the current supply device during a run-up phase,
- wherein the run-up phase comprises at least the interval from 1 s after ignition of the lamp to 3 s after ignition of the lamp, and
- wherein the programming unit effectuates a substantially rising gradient in time of the current during the run-up phase to a value of the current corresponding to a maximum current admissible for the lamp.

Claim 17 (new): A device for controlling a gas discharge lamp comprising:

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- a current supply device supplying the lamp with an alternating current of given amplitude,
- and a programming unit providing amplitude values to the current supply device during a run-up phase,
- wherein the run-up phase comprises the interval from a time after ignition of the lamp at which the lamp is operated with an alternating current to at least 3 s after said time, and
- wherein the programming unit effectuates a substantially rising gradient of the current over the run-up phase.